

ADVANCING ENGLISH LANGUAGE LEARNING FOR FOOD AND AGRICULTURAL SCIENCE MAJORS

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CSREES/USDA Relevant Priority or Mission Area:

- Curricula design, materials development, and library resources
- Instructional delivery systems
- Faculty preparation and enhancement for teaching
- Student recruitment and retention

Objectives:

Thirty agricultural science freshman will improve their English language skills in speaking, listening, reading, and writing through an interdisciplinary and technology based approach to language learning during a three-semester pilot curriculum (three 3-credit courses, 144 hours of training total).

Students will be able to:

- ask and respond to questions in pairs.
- hold a conversation with a professor in their field of study.
- present research findings to the class.
- listen to and understand a lecture and take notes based on this lecture.
- infer meaning from context; to identify and understand the main idea and supporting details of a text; to identify and understand different genres such as academic reading, job related readings, and personal readings; to interpret statistical graphics and tables and to provide a written description of the data.
- write a thesis statement, to use appropriate details to support a thesis, and to summarize and critically respond to readings in different genres.



Activities:

Basic Courses for Science and Agriculture Majors: The current Basic English curriculum will be revised to appeal specifically to food and agricultural science majors in order to promote their English language learning and retention in English courses. The revised curriculum will be created in consultation with experts in agricultural sciences and will use an interdisciplinary and technology based approach to language learning specific to students' field of study. Students will be recruited to enroll in the pilot curriculum series from incoming 2008-2009 school of agriculture students.

In-service Teacher Training Program (May 2008): In order to enable instructors to fully engage in teaching English across the disciplines, an In-service Teacher Training will be mandatory for instructors and tutors who will work on the proposed project. Expert advisors from the College of Agriculture will serve as guest speakers during the training.

Pre-basic Intensive Summer Institute (Summer 2008): Designed for first-year students joining the agriculture and science faculties, the Pre-basic Intensive Summer Institute will be mandatory to provide these students with the necessary tools to join the Basic English course for science and agriculture majors.

Symposium (Spring 2009): A symposium will take place in spring 2009 for those from other institutions which will include a panel of students discussing their experiences in the program, talks from expert advisors about the English language needs of students and professionals in the agricultural sciences, talks by the PI and Co-PI on the process of creating and piloting the curriculum, and opportunities for attendees to work together to discuss the possibility of applying the curriculum to their own contexts. This conference will be open to all faculties and campuses in the University of Puerto Rico system.



Baseline data collection (August 2007-May 2008): Baseline data will be collected on a sample of food and agricultural science freshman. Data analysis will use both qualitative and quantitative research methods to understand students' proficiency level, amount of improvement, and attitude towards the course.

Revised curriculum data collection/program assessment (June 2008-May 2009): Qualitative and quantitative data will be collected on the implementation of the revised curriculum in order to assess the program's effectiveness. Data will include: student entry and exit surveys; focus group interviews with students at the beginning and end of semester; copies of student work including writing and video-taped presentations; videotapes of selected class sessions; anonymous survey of attitudes toward the course (including course content, teaching methods, materials, etc.); student evaluations of teacher's performance; demographic survey; student entry and exit test scores. Data will be analyzed in order to measure student language learning in the program as well as student attitudes towards and satisfaction with the courses.

Beneficiaries:

Food and Agricultural Science Majors (30 students will receive 144 hours of training)

English Instructors (20 instructors will receive 20 hours of training)

Symposium Participants (30 participants will receive 8 hours of training)

Evaluation:

The following documents will be used to analyze and report the effectiveness of this project in meeting its established objectives:

- Survey results of faculty knowledge and engagement (pre and post-activity);
- Students' needs analysis (at the beginning of the semester);
- Participant and presenter evaluations of conference presentations, symposium and workshops;
- Development and distribution of course models;
- Reports on campus-based activities and their impact on student learning and faculty development
- Development of action plans for future years; and
- Development of longitudinal assessment models to measure changes in student English and communication skills

Expected Impact:

As a result of the proposed activities, the following outcomes are expected:

- Increased faculty commitment to identifying and reinforcing standards of language and communication skills in science and agriculture disciplines;
- A system-wide adoption of curriculum strategies for improving language and communication skills;
- Enhanced faculty expertise in designing and teaching English intensive courses across the curriculum; and,
- Improved student achievement on exit tests measuring English and communication skills.

In order to measure these outcomes, the following techniques will be used:

- Diagnostic Test
- Mid-term evaluation
- Exit Exam
- Instructors' Evaluation
- Student-teacher conferences
- Reflective Portfolios
- Exit interviews



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